

~~A1~~ 1. (Amended) A plasmid carrying gag, protease, env and rev genes, wherein the gag, protease, env and rev genes are derived from SIV (Simian immunodeficiency virus), and wherein the plasmid lacks tat and nef genes.

2. (Amended) The plasmid according to claim 1, which contains DNA construct of SIV/GE gene described in FIG. 1.

3. (Amended) The plasmid according to claim 1, which is pTV-SIV/GE described in FIG. 2 (Accession NO: KCTC 0702BP).

4. (Canceled)

5. A plasmid carrying a SIV-derived pol gene encoding for a reverse transcriptase and an integrase.

~~A2~~ 6. (Amended) The plasmid according to claim 5, wherein the integrase has been inactivated by modifying a site responsible for enzyme activity of integrase.

7. (Amended) The plasmid according to claim 6, wherein the site responsible for enzyme activity of integrase is at positions 5130-5135, and wherein the bases at positions 5130-5132 are deleted, and the bases at positions 5133-5135 are substituted by a codon for serine.

8. (Amended) The plasmid according to claim 5, wherein the 5'-end of pol gene is fused to signal sequence of a secretion protein.

9. (Amended) The plasmid according to claim 8, wherein the secretion protein is glycoprotein D (gD) of herpes simplex virus (HSV).

10. (Amended) The plasmid according to claim 5, wherein the SIV-derived pol gene comprises a DNA construct of the SIV/pol gene described in FIG. 1.

11. (Amended) The plasmid according to claim 5, wherein the SIV-derived pol gene is pTV-SIV/pol described in FIG. 2 (Accession NO: KCTC 0703BP).

12. (Canceled)

~~13.~~ (Amended) A DNA vaccine for prevention and/or treatment of AIDS comprising:

a first plasmid carrying gag, dpol, env and rev gene, wherein the gag, dpol, env and rev genes are derived from SIV (Simian immunodeficiency virus), and wherein the first plasmid lacks tat and nef genes; and/or

a second plasmid carrying a SIV-derived pol gene encoding for a reverse transcriptase and an integrase.

14. (Canceled)

~~15.~~ (New) The DNA vaccine of claim 13, wherein the first plasmid comprises the DNA construct of SIV/GE gene shown in FIG. 1.

16. (New) The DNA vaccine of claim 13, wherein the first plasmid is pTV-SIV/GE shown in FIG. 2 (Accession NO: KCTC 0702BP).

17. (New) The DNA vaccine of claim 13, wherein the pol gene of the second plasmid encodes an inactive integrase of which the site responsible for enzyme activity of integrase is mutated.

18. (New) The DNA vaccine of claim 17, wherein the site responsible for enzyme activity of integrase is the bases at positions 5130-5135, and wherein the bases at positions 5130-5132 are deleted, and the bases at positions 5133-5135 are substituted by bases encoding serine.

19. (New) The DNA vaccine of claim 13, wherein the 5'-end of the pol gene of the second plasmid is linked to the signal sequence of a secretion protein.

20. (New) The DNA vaccine of claim 19, wherein the secretion protein is glycoprotein D (gD) of Herpes simplex virus (HSV).

21. (New) The DNA vaccine of claim 13, wherein the second plasmid comprises a DNA construct of a SIV/pol gene shown in FIG. 1.

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concluded

22. (New) The DNA vaccine of claim 13, wherein the second plasmid is pTV-SIV/pol shown in FIG. 2 (Accession NO. KCTC 0703BP).
